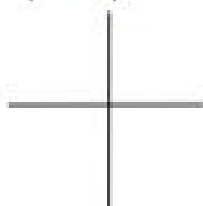


Unit 4 Lesson 2D - Practice Day

Directions: Using special right triangles (30 - 60- 90 and 45 - 45- 90), find the value of the reference angle ($*$), the angle (θ) and the six trig functions.

1. $P(-1, \sqrt{3})$



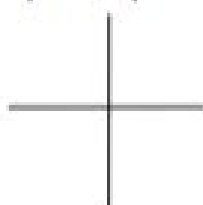
$*$ = _____ θ = _____

$\sin(\theta) =$ _____ $\csc(\theta) =$ _____

$\cos(\theta) =$ _____ $\sec(\theta) =$ _____

$\tan(\theta) =$ _____ $\cot(\theta) =$ _____

3. $P(-6, 6\sqrt{3})$



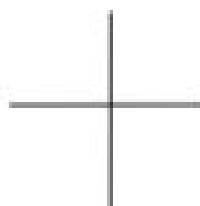
$*$ = _____ θ = _____

$\sin(\theta) =$ _____ $\csc(\theta) =$ _____

$\cos(\theta) =$ _____ $\sec(\theta) =$ _____

$\tan(\theta) =$ _____ $\cot(\theta) =$ _____

2. $P(1, -1)$



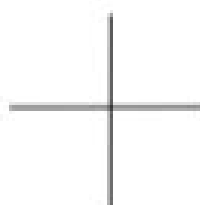
$*$ = _____ θ = _____

$\sin(\theta) =$ _____ $\csc(\theta) =$ _____

$\cos(\theta) =$ _____ $\sec(\theta) =$ _____

$\tan(\theta) =$ _____ $\cot(\theta) =$ _____

4. $P(2, -2)$



$*$ = _____ θ = _____

$\sin(\theta) =$ _____ $\csc(\theta) =$ _____

$\cos(\theta) =$ _____ $\sec(\theta) =$ _____

$\tan(\theta) =$ _____ $\cot(\theta) =$ _____

Directions: Draw a triangle in the quadrant indicated. Label the sides and determine the reference angle (*), the angle (θ) and the other trig functions.

5. $\sin(\theta) = \frac{-5}{5\sqrt{2}}$, Quadrant III



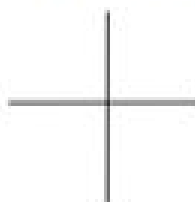
* = _____ θ = _____

$\sin(\theta)$ = _____ $\csc(\theta)$ = _____

$\cos(\theta)$ = _____ $\sec(\theta)$ = _____

$\tan(\theta)$ = _____ $\cot(\theta)$ = _____

6. $\csc(\theta) = -2$, Quadrant IV



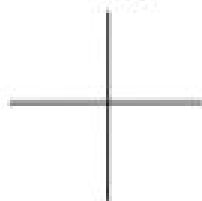
* = _____ θ = _____

$\sin(\theta)$ = _____ $\csc(\theta)$ = _____

$\cos(\theta)$ = _____ $\sec(\theta)$ = _____

$\tan(\theta)$ = _____ $\cot(\theta)$ = _____

7. $\sec(\theta) = \frac{2}{\sqrt{3}}$, quadrant I



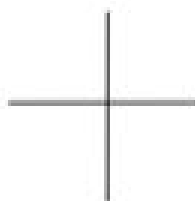
* = _____ θ = _____

$\sin(\theta)$ = _____ $\csc(\theta)$ = _____

$\cos(\theta)$ = _____ $\sec(\theta)$ = _____

$\tan(\theta)$ = _____ $\cot(\theta)$ = _____

8. $\tan(\theta) = -\sqrt{3}$, quadrant II



* = _____ θ = _____

$\sin(\theta)$ = _____ $\csc(\theta)$ = _____

$\cos(\theta)$ = _____ $\sec(\theta)$ = _____

$\tan(\theta)$ = _____ $\cot(\theta)$ = _____

Directions: Using the special right triangles, name two angles to the nearest degree for θ in the interval $(0, 360)$

9. $\sin \theta = \frac{-1}{2}$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

10. $\tan \theta = 1$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

11. $\csc \theta = -2$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

12. $\cot \theta = -1$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

13. $\cos \theta = \frac{-1}{2}$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

14. $\sin \theta = \frac{\sqrt{3}}{2}$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

15. $\csc \theta = \frac{-2}{\sqrt{3}}$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____

16. $\sec \theta = 2$



$\bullet =$ _____

$\theta =$ _____

$\theta =$ _____